

III. HAZARDS THEME

Definition

Coastal hazards include both natural and man-made events (chronic and episodic) that threaten the health of coastal ecosystems and communities. This definition includes, but is not limited to, hurricanes, tsunamis, erosion, oil spills, harmful algal blooms, and pollution. Center projects in this theme area work to reduce the environmental, social, and economic impacts from coastal hazards by providing information and tools that facilitate increased decision-support capabilities for coastal managers.

GOAL 1

Coastal communities have a significant reduction in loss of human, environmental, and economic impacts from both man-made and natural hazards

Objectives

- 1.1 Reduce impacts from coastal hazards by developing effective hazard mitigation strategies based on the systematic evaluation of risks and vulnerabilities of Center clients and their communities.
- 1.2 Increase the development of techniques that more comprehensively calculate the impacts and costs of coastal hazard events and the economic benefits of hazard mitigation activities.
- 1.3 Increase the awareness of the hazard mitigation benefits of natural systems to promote informed and comprehensive decision making.
- 1.4 Broaden the focus of hazard mitigation to include social consequences such as behaviors, beliefs, and values by incorporating these considerations into Center tools and products to fully address the issue of human health and safety.

Strategies

- Work with clients and partners to increase the use of the risk and vulnerability assessment methodology developed at the Center by creating focused training, encouraging local implementation, and improving the integration of economic, environmental, and social science principles.
- Contribute to existing research (i.e., through grants, partnership projects, studies, workshops, etc.) on assessing the economic and social benefits and cost savings derived from hazard mitigation strategies and efforts.
- Enhance the capability to use geographic information systems, remote sensing, and spatial data for hazards planning and assessment through active partnerships with the Federal Emergency Management Agency (FEMA), the U.S. Geological Survey (USGS), and the coastal management community.
- Develop targeted outreach materials for improving hazards awareness and enhancing hazard mitigation planning (i.e., technical briefs, conference presentations, Internet sites, press releases, articles, publications, refrigerator magnets, etc.).

GOAL 2

The hazard-risk and vulnerability data, information, and application needs of Center clients are met

Objectives

- 2.1 Develop relevant hazards data, value-added services, and applications in a useful form in order to promote better decision making.
- 2.2 Identify and provide critical hazards data and information (physical, social, economic, and environmental) through targeted and improved delivery mechanisms in order to promote better decision making.
- 2.3 Identify and adhere to industry and client group standards and protocols when developing data and applications to ensure that Center products are usable by clients.

Strategies

- Stay current with technology changes and assess clients' needs and capabilities to ensure all Center hazards products are appropriate and useful to the client community.
- Continue efforts to develop relevant hazards data, value-added services, and applications for risk and vulnerability assessment, including Light Detection and Ranging, new data development techniques and protocols, data conversion, data integration, methodology development, modeling, and applied research.
- Contribute to existing research (i.e., through grants, partnership projects, studies, workshops, etc.) that assesses the economic benefits and cost savings derived from hazard mitigation strategies and efforts.
- Develop targeted outreach materials for improving hazards awareness and enhancing hazard mitigation planning.

GOAL 3

Awareness and coordination among client groups is achieved, eliminating redundancy or gaps in hazards-related activities

Objectives

- 3.1 Promote awareness and sharing of vulnerability assessment methods.
- 3.2 Increase visibility of the Center's hazards theme activities by elevating outreach efforts in order to ensure effective communication, enhance the prioritization of hazards planning, and reduce redundant efforts.
- 3.3 Facilitate partnership building and awareness of all client groups to clarify roles, responsibilities, expertise, and expectations to more effectively reduce coastal hazards impacts.

Strategies

- Create outreach plan development team to identify target audience and partners, inventory existing resources and needs, and determine necessary materials and products.
- Convene and facilitate meetings of client groups to improve use, eliminate redundancy, and identify gaps in hazard efforts.

- Develop targeted outreach materials for improving hazards awareness and enhancing hazard mitigation planning.
- Target key Center partners to continue efforts to develop and host content-based workshops and symposia on hazards issues.
- Continuously evaluate Center hazards projects, products, and processes for relevance and effectiveness in meeting the needs of the clients.
- Facilitate meetings and workshops on coastal hazards issues to establish communication between state and federal agencies and organizations; encourage coordination in comprehensive planning activities among these agencies and organizations; and identify sources of funding that would enable these communities to dedicate resources to hazards planning and policy decisions.

GOAL 4

Coastal managers have the knowledge and skills to develop and implement hazard mitigation policies and practices

Objectives

- 4.1 Increase knowledge of hazard mitigation by working to inform and train current and future coastal managers.
- 4.2 Create training and methodologies for effective use of Center-developed data and applications in order to maximize clients' skills and abilities to use products.
- 4.3 Partner with clients to develop information, techniques, and processes to advance their policy and management options for reducing coastal hazard impacts.
- 4.4 Coordinate the flow of information and resources regarding training, data, and technical tools available through other sources.

Strategies

- Gather internal and external input on existing hazards curriculum, determine needs within client community, develop or adapt curriculum for coastal resource managers, and identify appropriate delivery mechanisms.
- Work with clients and partners to increase the use of the risk and vulnerability assessment methodology developed at the Center by creating focused training, encouraging local implementation, and improving the integration of economic, environmental, and social science information.
- Work with existing networks of training professionals to provide access and delivery of information, tools, and training to the coastal management community.